

Research Translation and Outreach Core University of Washington

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Overview

- ◆ Research Translation activities largely an outgrowth of previous and current outreach activities
- ◆ Individual “needs assessment” approach to research translation and outreach activities
- ◆ Previous target audience included K-12

Partnerships with Government Agencies

- ◆ EPA Region 10 (Lower Duwamish Waterway and Lake Roosevelt sites)
 - ◆ Community involvement and Public Information Program - Kathleen Veit
 - ◆ Environmental Assessment and Risk Evaluation Unit - Marc Stifelman
- ◆ Washington State Department of Health (Lake Roosevelt, Rayonier Mill and Whatcom Waterway sites)
 - ◆ Office of Environmental Health Assessment - Rob Duff, Wayne Clifford, Rob Banes
- ◆ Washington State Department of Ecology (Lower Duwamish Waterway and Rayonier Mill sites)
 - ◆ Site Public Involvement - Bill Harris, Justine Asohmbom
- ◆ Seattle King-County Public Health (Lower Duwamish Waterway site)
 - ◆ Environmental Health Division - Morgan Barry

Ongoing Activities with Government Agencies

- ◆ Consultation on seafood safety messages
 - ◆ Site-specific at Lower Duwamish Waterway, Whatcom Waterway and Lake Roosevelt
 - ◆ Generally for Puget Sound
- ◆ Research Briefs
 - ◆ A communication tool to share information on site-specific Hg (Dr. Woods) and PCB (Dr. Gallagher)
- ◆ Agency Seminar Series
 - ◆ Update from the NAS Dioxin Panel Review (Dr. Eaton)
 - ◆ Other UW-SBRP Investigators

Eat Fish, Be Smart, Choose Wisely!

2-3 MEALS PER WEEK FROM THIS LIST

OR

1 MEAL PER WEEK FROM THIS LIST

AVOID

Follow these guidelines to reduce exposure to mercury, PCBs, and other contaminants.

Anchovies	Salmon (fresh, canned)	Black sea bass	Mahi mahi
Butterfish (Silver pomfret)	Chinook (coastal, Alaska)	Chilean sea bass	Monkfish
Catfish	Chum	Chinook salmon (Puget Sound)	Rockfish/Red snapper (trawl caught)
Clams	Coho	Croaker (white, Pacific)	Sablefish
Cod (Pacific) (Atlantic)	Farmed (Atlantic)*	Halibut (Pacific) (Atlantic)	Tuna (canned white Albacore)
Crab (blue, king, snow, US, Canada) (Russia)	Pink	Lobster (US, Canada)	
Crayfish	Sockeye		
Flounder/Sole	Sardines		
Herring	Scallops		
Oysters	Shrimp (US) (imported)		
Pollock/Fish sticks	Squid/Calamari		
	Tilapia		
	Trout		
	Tuna (canned light)		

MEAL SIZE: by sight
 A 'Meal' appropriate for your body size is roughly the size and thickness of your hand.

* The health and environmental impacts of farmed salmon are controversial. For more information, visit www.doh.wa.gov/fish/farmed-salmon.

MEAL SIZE: by weight
Adult 'Meal' = 8 oz. UNCOOKED (Based on a 160 lb. adult)
Child's 'Meal' = 4 oz. UNCOOKED (Based on an 80 lb. child)
 To personalize a meal size, add or subtract 1 ounce per 20 lb. difference in body weight.

Women who are or may become PREGNANT, NURSING MOTHERS, and CHILDREN should NOT eat these fish:

Mackerel (King)	Tilefish
Shark	Tuna steak
Swordfish	

ORANGE TEXT indicates seafood choices that are over-fished or are harvested in environmentally harmful ways.

Partnerships with Community Organizations & Tribal Nations

- ◆ Tribal Nations
 - ◆ Confederated Tribes of the Colville Reservation
 - ◆ Lower Elwha Klallam Tribe
 - ◆ Shoalwater Tribe
 - ◆ Spokane Tribe
 - ◆ Swinomish Tribe
- ◆ Community Organizations
 - ◆ Duwamish River Cleanup Coalition
 - ◆ International District Housing Alliance (Project WILD)
 - ◆ Marine Resources for Future Generations
 - ◆ North Sound Baykeepers
 - ◆ Olympic Environmental Council Coalition

Activities with Community Organizations & Tribal Nations

- ◆ Educational Tours
 - ◆ Superfund site tours
 - ◆ UW Lab tours
- ◆ Attend/co-sponsor Public Meetings
 - ◆ Northwest Toxic Communities Summit
 - ◆ Site update meetings
- ◆ Risk Communication materials
 - ◆ Good Food from the Sea booklet
 - ◆ Hands-on seafood safety demos
 - ◆ Research Briefs (focused on site-specific Hg and PCB issues)



Partnerships with Broad Audiences

- ◆ Continuing Education Courses
 - ◆ Reporters/Media
 - ◆ Physicians/Primary Care Providers/School Nurses
- ◆ SBPR Website
 - ◆ Research translation materials for agencies and communities/tribes (provide links to their websites)
 - ◆ Links to other resources (PEHSU, Child Health Center, CARE NW, Center for Ecogenetics and EH)
- ◆ Presentations
 - ◆ Parkinson's Disease support group (Dr. Checkoway)
 - ◆ PON and Biosensor Seminars (Dr. Furlong)

Technology Transfer

Development of engineered recombinant PON1 as a therapeutic

- ◆ Original PON1 protein/cDNA sequence submitted as an invention disclosure (~1990).
- ◆ Expression of rPON1 in *E. coli* (Successful, purification underway)
- ◆ Catalytic efficiency of PON1 modified by site specific/random mutagenesis (underway)

Biosensor system for real-time analysis of environmental analytes

- ◆ A 24-channel portable surface plasmon resonance (SPR)-based biosensor system has been developed and a patent applied for through the UW. The technology has been licensed to a local start-up company. While the system was developed under other support, it has many applications for SBRP-related research and applications. The following shows the sequential detection of 8 different analytes by the system. It will also detect small organics, including explosives residues.

